# Record

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE November 6, 1962 Vol. XIV, No. 22 NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE

# Gairdner Award For Dr. Sarnoff

Dr. Stanley J. Sarnoff, Chief of the National Heart Institute's Laboratory of Cardiovascular Physiology, has been named recipient of 1962 Gairdner Foundation Award

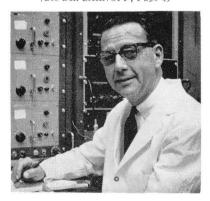
Dr. Sarnoff's award-which carries with it a prize of \$5,000—is for his elucidation of important principles of cardiac physiology, which have clarified the roles played by the involuntary nervous system and hormones in controlling heart function in both normal and diseased states.

### Established in 1957

The Foundation, established in 1957 by J. A. Gairdner, Toronto industrialist and financier, encourages and rewards individuals who have made contributions to the conquest of disease and the relief of human suffering.

The Foundation has expressed the hope that these awards will assist in focusing attention upon arthritis, the rheumatic diseases, and cardiovascular disease, three of today's most important medical problems.

In deciding upon recipients for the awards, the Foundation secures the confidential advice of many medical prominent scientists throughout the world. It has now (See DR. SARNOFF, Page 4)



Dr. Stanley J. Sarnoff, Chief of the Laboratory of Cardiovascular Physiology, NHI, pictured in his Laboratory in the Clinical Center.-Photo by Sam Silverman.

# Heart Studies Win Whole-Body Radiation Counter Dr. Smadel Wins Broadens NIH Research Field Lasker Award,



A transparent manikin, "Christine," is lowered into the U-shaped trough of the Clinical Center's new whole-body radiation counter by Dr. Howard L. Andrews, NIH Radiation Safety Officer, and his assistant, Dorothy Peterson. Eighteen gamma ray counters, concealed by the sheet covering the trough, will detect and locate radioactive material in Christine's "body."-Photo by Jerry Hecht.

### By Dorothy Jeanne Davis.

The first whole-body radiation counter capable of recording separately the amount of radiation in 18 different sections of the body is now in operation in the NIH Clinical Center.

Use of the new instrument is expected to enable scientists of the nine Institutes to conduct more sensitive, more accurate, and more detailed studies involving low levels of radiation.

### Designed for NIH

The new instrument is an experimental model specially designed and constructed for the NIH. It is more flexible and sensitive than any built so far. Its features make it possible to detect the most minute amounts of radioactive material within the body, and to determine what part of the body the radioactive material is in.

Its projected research applications include blood and metabolic disorders and studies of the amount of radioactive iodine from fallout that gets into the bodies of infants and small children, how much remains, and how long it remains.

Other research projects are planned for the new counter, together with a second whole-body

counter that sorts out and identifies the particular isotope or isotopes present in the body. They range from studies on the distribution of potassium in the body to studies on the effectiveness of various types of radiation-shielding for sensitive instruments, according to Dr. Howard L. Andrews, NIH Radiation Safety Officer, who is in charge of the counting facility. located in the third sub-basement of the Clinical Center.

### Gives Rapid Count

The new instrument takes only two or three minutes to count the total amount of radiation in the body. More detailed studies may take half an hour or more.

Six-and-a-quarter-inch armor plate salvaged from old battleships at the Philadelphia Navy Yard was used to construct the 8-by-12foot rooms in which each of the whole-body counters is located.

Use of the old armor plate-now quite scarce—was necessary to re-(See RADIATION, Page 7)

# Maryland Degree

Dr. Joseph E. Smadel, Chief of the Laboratory of Virology and Rickettsiology, Division of Biologics Standards, was the recipient of two outstanding honors within the past two weeks.

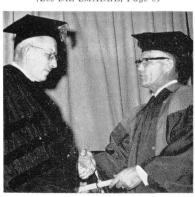
On October 17 the Albert and Mary Lasker Foundation announced that Dr. Smadel was the winner of its Clinical Research Award, one of the two 1962 Albert Lasker Medical Research Awards, for his contributions to the treatment of typhoid fever and the rickettsial diseases.

### Receives D. Sc. Degree

Dr. Smadel was further honored October 24 by the University of Maryland, when he received an honorary Doctor of Science degree at the fall convocation of the University's School of Medicine, held in the auditorium of the Health Sciences Library in Baltimore.

At the same ceremony, Dr. Wilson H. Elkins, President of the University, conferred an honorary Doctor of Laws degree on Lt. Gen. Wajid Ali Burki, Special Assistant to the President of Pakistan. General Burki, an ophthalmologist and Director General of Medical Services of the Pakistan Army, was a recent visitor to NIH.

(See DR. SMADEL, Page 8)



Dr. Joseph E. Smadel, Chief of the Laboratory of Virology and Rickettsiology, DBS, receives the honorary degree of Doctor of Science from Dr. Wilson H. Elkins, President of Maryland University.-Md. U. Photo.

# Record

Published bi-weekly at Bethesda, Md., by the Public Information Section, Office of Research Information, for the information of employees of the National Institutes of Health, principal research center of the Public Health Service, U. S. Department of Health, Education, and Welfare.

NIH Record Office......Bldg. 31, Rm. 5B41. Phone: 496-2125

E. K. Stabler

### Staff Correspondents

Betty Slattery, NCI; Tony Anastasi, NHI; Kathryn Mains, NIAID; Mary Henley, NIAMD; Marie Norris, NIDR; Lillie Bailey, NIMH; Pat MacPherson, NINDB; Elsie Fahrenthold, CC; Faye Heil, DBS; Helene Doying, DRFR; Dick Turlington, DRG; Jean Torgerson, DRS.

# NEWS from **PERSONNEL**

REDUCTION IN INSURANCE RATES

As a result of an amendment to the Federal Tort Claims Act reducing liability of Government employees who operate their own or Government vehicles in line of duty, a majority of United States insurance companies are reducing their liability rates for Federal employees.

Prior to the March 21 effective date of the legislation, employees who drove on Government business were advised to carry Class 3 (business car rate) insurance for

complete protection.

The new provisions of the Claims Act do not entirely remove responsibility from the driver in case of accident, as there are some instances in which the Government cannot assume liability.

For this reason, it is suggested that each employee request his insurance agent to determine the position of his company in regard to the lower rate.

### OVERTIME COMPENSATION

The determination of overtime hours for wage rate employees has been changed by a new law, P. L. 87-581. Previously, only hours in excess of forty per week were compensated at time and one-half of the basic compensation rate. Under the new law, overtime work in excess of eight hours per day has also been paid for at the time and one-half rate, beginning October

Exempted from this provision are those employees who are on duty in a standby or on-call status in excess of eight hours per day. These employees will be paid at the overtime rate only for hours of duty in excess of forty per week.

The basic forty-hour week will be retained for retirement and group life insurance purposes.

Further information is available

### Special Job Opportunities

Correspondence Clerk, GS-4, preferably with some college study in English or journalism, needed by NIH Board of Civil Service Examiners.

Engineering Draftsman, GS-3 or 4, needed in Space Management Section.

Mechanical Engineer, GS-12, with experience in AC Refrigeration and Heat and Ventilation Systems.

Pharmacologist, GS-11 or 12, for Administrative position with NCI in the Robin Building, Silver Spring.

Medical Technologists, GS-5

Digital Computer Programmers, GS-9 and 11.

### **GWU** Faculty Member Named to DGMS Post

Dr. Paul W. Bowman, Head of the Biology Department of George Washington University, has been appointed a Research Grants Coordinator in the Research Grants Branch, Division of General Medical Sciences. He had been a member of the George Washington faculty for the past 38 years.

Beginning as an assistant in botany at George Washington, Dr. Bowman established the Department of Biology in 1934, supervising its course of studies, administering its graduate and undergraduate programs, and teaching courses in cytology and organic evolution until this year.

During World War II, he served as Special Assistant to the President of George Washington Univerity in connection with the scientific programs for the national defense effort. In 1943 and 1944 he was Administrative Director of the Allegheny Ballistics Labora-

from Institute and Division Personnel Officers.

### GM and L Tops UGF Quota For Third Straight Year

They've done it again! For the third consecutive year the members of the Grounds Maintenance and Landscaping Section of Plant Engineering Branch, DRS, have exceeded their dollar quota for the UGF Campaign.

This year they totaled 149 percent of quota, and each of their four keymen-Tom Cook, Ernest Smith, Paul Smith, and Hoover Rowell-have attained more than 110 percent of their unit quotas.

## PEB to Distribute New Service Bulletin'

The Service Bulletin, a new publication of the Plant Engineering Branch, DRS, designed to help NIH personnel make the most effective use of the PEB services, will be distributed soon to all offices on the NIH Policy and Procedure Memoranda distribution keys, 1 through 10,

The 4-page, letter-size bulletin, printed on heavy weight paper to facilitate its use as a desk reference, will be issued, as required, to keep employees informed of significant changes in services and procedures.

The first issue describes the services available and lists the offices to be contacted to obtain them.

For instance, it explains the procedures to be followed for requesting alterations, for reporting maintenance deficiencies, for the delivery of equipment for repair or modification, and for the purchase of certain types of equipment.

Page 4 carries a reproduction of a work-request form properly filled

Additional copies of the first issue may be obtained from the Administrative Office, PEB, Ext.

### Dr. Brown Moderator Of IRE Program Today

Dr. J. H. U. Brown, Chief of the Special Research Resources Branch, Division of Research Facilities and Resources, is scheduled to be moderator today (November 6) for a program on the qualifications and training of biomedical engineers at the meeting of the Institute of Radio Engineers, being held this week in Chicago.

The keynote address on "The Role of Biomedical Engineering in Modern Medicine" was scheduled to be delivered by Boisfeuillet Jones, Special Assistant to the Secretary, Department of Health, Education, and Welfare, following the annual Institute banquet last night.

# NIH-UGF Drive Reaches 64 Percent of Quota

Reports at the end of the third week of the UGF Campaign here revealed that NIH had reached 64.3 percent of its quota. The \$56,333.90 collected by October 26 represented a 100 percent increase over the previous week's receipts.

In commenting on the third week's results, Dr. Clinton C. Powell, Chairman of the NIH Campaign, said, "Although this represents a substantial increase over last week, we have a lot of ground to cover before reaching 100 percent. Whether NIH goes over the top this year will depend upon the efforts of each Division and Institute."

As of October 26, two Divisions had exceeded 100 percent of their quotas, and one Institute and four Divisions were over 70 percent.

DRFR leads NIH with 114.7 percent, followed closely by DRG with 109.9 percent. Those with 70 percent or more of their quotas were: OD, 97.2; DGMS, 96.9; DBS, 88.7; DRS, 79.3; and NIAMD, 70.6.

Sixty percent of the NIH employees contributed to this year's Campaign during the first three weeks with an average gift of \$10.55.

This year's Campaign witnessed publication of the UGF-PHS Keyman, a 4-page, 3-issue publication concentrating on the highlights of the Campaign within the Public Health Service. It is edited by Dick Turlington of the DRG Information Office.

On October 23 an enthusiastic audience witnessed the 1962 UGF Rally in the Clinical Center Auditorium. Speakers at the Rally were Dr. Powell, Dr. Jack Masur, Director of the Clinical Center and Chairman of the overall PHS Campaign, and Dr. David Price, PHS Deputy Surgeon General.



In one of the scenes from the skit allegedly depicting "The Spirit of UGF at NIH," Linda Perry, DGMS (left), and Janet Perry, DRS, cavort onstage. -Photo by Bob Pumphrey.

## BQA Identified as Agent Of Pigment Formation In Alcaptonuria Patients

Drs. Vincent G. Zannoni, S. E. Malawista, Bert N. La Du and their associates in the Arthritis and Rheumatism Branch, National Institute of Arthritis and Metabolic Diseases, have identified benzoquinoneacetic acid (BQA), the oxidized form of homogentisic acid, as a probable intermediate in the brown-black discoloration of connective tissue in alcaptonuria.

In addition, they have postulated a scheme to explain the full sequence of events leading to ochronosis in alcaptonuric individuals.

These studies may lead to development of a much-needed model system to study the pathological changes in the arthritis of alcaptonuria.

### Inherited Disease

Alcaptonuria is an inherited metabolic disease caused by the lack of a specific enzyme, homogentisic acid oxidase, necessary to convert homogentisic acid to maleylacetoacetic acid.

This enzyme is missing at birth, but it is not until many years later that ochronosis, the brown-black pigmentation of the cartilage, tendons, and other connective tissues appears. It takes even longer before the patient develops degenerative arthritis of the spine and the large peripheral joints, a characteristic of this disorder.

Although these arthritic changes appear in the pigmonted areas, no chemical relationship between the apparently interrelated conditions has yet been established.

### Devise Measuring Method

The NIAMD scientists developed a specific enzymatic method for measuring homogentisic acid (HGA) and used this technique to study the distribution of HGA and its metabolic derivative, BQA, in vivo and in vitro.

Both HGA and BQA, when given intraperitoneally to guinea pigs, were distributed mainly into skin and cartilage. In vitro experiments, however, showed that BQA reacts chemically with skin and cartilage, resulting in a change in its molecular structure to form products similar to those formed during the development of ochronotic pigmentation of the connective tissues in alcaptonuria.

In contrast to BQA, HGA is loosely bound to skin and cartilage and no chemical change takes place.

Further studies are now underway with purified collagen (connective tissue) preparations to determine the binding site of BQA within the tissues.

The studies were reported in Arthritis and Rheumatism.

### PAKISTAN MEDICAL DIRECTOR VISITS NIH



The Special Assistant to the President of Pakistan, Lt. Gen. Wajid Ali Burki (left), chats with Dr. James A. Shannon, Director of NIH (center), and Dr. Theodore E. Woodward, Professor of Medicine, University of Maryland School of Medicine, during his visit here October 22. An ophthalmologist and Director General of Medical Services of the Pakistan Army, Gen. Burki attended a luncheon in his honor in the Executive Dining Room, Building 31, and later conferred with several NIH scientists. In addition to NIH administrators, the luncheon guests included PHS Surgeon General Luther L. Terry, the Surgeons General of the U. S. Army and Air Force, and representatives of the Departments of State, Navy, and Interior, and the Agency for International Development.—Photo by Sam Silverman.

# Immunological Aspects of Polysaccharides Subject of Second Freund Seminar

Dr. Michael Heidelberger, Professor of Microbiology at Rutgers University and acknowledged dean of American immunologists, gave the Second Jules Freund Memorial Seminar, October 17, in the 14th Floor auditorium of the Clinical Center.

His subject was "Chemical Constitution and Immunological Specificity of Polysaccharides."

Complex polysaccharides are widely distributed in nature, Dr.



Dr. Michael Heidelberger, Professor of Microbiology at Rutgers University (left), receives a scroll from Dr. Maurice Landy, Chief of the Laboratory of Immunology, NIAID, commemorating the Second Jules Freund Memorial Seminar which he presented here October 17.—Photo by Bob Pumphrey.

Heidelberger said, and are of increasing interest to the clinician and the immunologist.

In investigations which have continued for more than a decade, Dr. Heidelberger has developed ingenious techniques and reagents with which he has been able to determine the fine structure of many of the capsular polysaccharides of the pneumococci, which confer on these pathogenic bacteria their individual immunological specificities.

### Makeup Complex

He has obtained increasing evidence that certain aspects of their complex makeup are shared with a seemingly endless array of naturally occurring polysaccharides in bacteria, yeasts, seeds, and various foodstuffs.

The immunological cross reactions between these complex sugars of diverse origin and pneumococcal antisera were shown to be due to their possessing individual component sugars or chemical groupings in common with the pneumococcal polysaccharides. Dr. Heidelberger and his coworkers have amassed an extensive collection of antigens and immune sera, and with his knowledge of their serologic cross reactivities, have been able to "fingerprint" naturally occurring polysaccharides and iden-

# Schools' Effect on Child Learning To Be Reported

Dr. Joseph M. Bobbitt, Associate Director of the National Institute of Mental Health, will be the introductory speaker when a report on a study of the effects of modern and traditional schools on children's learning is presented to the public.

The report, presenting the findings of a 6-year NIMH-supported research study, will be made Monday, November 19, at 8:15 p.m. in the Clinical Center auditorium.

### 4th Graders Studied

Psychologists, educators and a social anthropologist on the staff of the Bank Street College of Education in New York City have studied the impact of school experience on a sampling of fourth-grade children in a large city.

The study centered around four different types of schools with educational philosophies ranging from relatively "modern" to relatively "traditional." All the children participating in the study came from similar socio-economic backgrounds.

The report will be presented by Dr. Barbara Biber, Director of Research, and Drs. Patricia Minuchin, Edna Shapiro and Herbert Zimilies of the Bank Street College of Education.

### Ideal as Subjects

Fourth-grade students were used in this study, according to Dr. Biber, because these nine and 10-year olds have grown out of the pre-school stage but are not yet affected by the very particular problems of adolescence. Furthermore, the fourth-grade children have already had several years of school experience.

The children were tested individually and in groups. Classroom activities and teaching methods were observed and all parents interviewed.

The meeting in the Clinical Center is sponsored by the Washington Associates of Bank Street College of Education and is open to the public.

tify the structural details of these biologically important materials.

The Seminar, a special feature of the weekly series of Immunology Seminars cosponsored by several of the Institutes, was organized last year by the Laboratory of Immunology, National Institute of Allergy and Infectious Diseases. It is presented annually in tribute to the late Dr. Jules Freund who was the first Chief of the Laboratory from 1957 until his death in 1960.

### DR. SARNOFF

(Continued from Page 1)

conferred awards and cash prizes totaling \$150,000 on 23 medical scientists in several countries.

Winners of the Foundation's other 1962 awards are Dr. Francis H. C. Crick of the Laboratory of Molecular Biology, Cambridge, England; Dr. Albert H. Coons, Harvard Medical School; Dr. Clarence Crafoord, Karolinska Institute, Stockholm, Sweden; and Dr. Henry G. Kunkel of the Rockefeller Institute.

The winners will receive their awards at a presentation dinner in Toronto on November 23. During that day they will visit medical laboratories and departments at the University of Toronto. The following day they will present lectures open to the medical profession

### Nobel Winner Honored

Dr. Crick, a 1962 Nobel Prize winner, will receive the Foundation's \$25,000 Award of Merit, presented this year for the first time since 1959. It is being awarded to Dr. Crick for making a major contribution to the solution of one of the most challenging biological problems: the manner in which genetic "information" is impressed upon the germ cells of parents and transmitted to succeeding generations.

The three other recipients will get awards of \$5,000 each.

Dr. Sarnoff has made important contributions to cardiac physiology, particularly to the understanding of those factors which control the work and the energy requirement of the heart. His studies have provided a direct confirmation of the validity and importance of Starling's Law of the Heart.

### **Briefly Described**

This law states that the strength of cardiac contraction becomes greater with increasing length or stretch of heart muscle fibers, prior to contraction.

In subsequent studies Dr. Sarnoff and his colleagues extended and systematized knowledge of the influence of the sympathetic nervous system and norepinephrine on the heart and then integrated these phenomena with the basic fiber length mechanism in a manner which brought great clarity and understanding to a highly complex field.

This earlier work concerned mainly the strength of contraction of the ventricles. Recently, Dr. Sarnoff and associates have shown that the function of the atria can also be stimulated or depressed under the influence of the autonomic or involuntary nervous system and under certain circumstances may be of great impor-



Harold W. Curran, DRG Executive Officer, presents Sustained Superior Performance Awards to (left to right): Ethel R. Weinstein of the Career Development Branch and Wilma L. Verrato of the Statistical Analysis Branch at an informal ceremony on October 1.

# Snow Urgently Needed to Save Trees Weakened by Long Summer Drought

Snow—a word that brings shudders to NIH motorists—is being uttered almost prayerfully these days by the men whose job it is to clear the reservation roads and parking lots after winter storms.

Snow is urgently needed, says Milford D. Myers, Chief of the Grounds Maintenance and Landscaping Section, Plant Engineering Branch, DRS, to keep alive the reservation's trees which have been weakened by last summer's prolonged drought.

The drought-produced situation is so serious that on November 1 Mr. Myers' staff dropped all its other work to devote full time to "deep watering" many of the nearly 7,000 trees on the NIH grounds.

This consists of watering the roots of the trees from two feet below the surface upwards to the surface, a reverse of the usual procedure. It is accomplished, Mr. Myers said, by sinking "root needles"—long, pointed, perforated pipes—into the ground at the base of the trees and forcing water through them at the root system.

tance in regulating the work of the ventricles.

By demonstrating the importance of the central nervous system in controlling the performance of the heart, Dr. Sarnoff has established physiological principles that have allowed physicians to better understand the action of the heart in normal and diseased states.

His work has embraced many other subjects, including the mechanisms and treatment of acute lung congestion, experimental cardiac surgical techniques, and the mechanism of action of normal heart valve closure.

Dr. Sarnoff received his A.B. degree from Princeton University

A chemical agent is added to the water to break its surface tension, thus enabling greater penetration.

Mr. Myers estimates that the severe shortage of rainfall this year has resulted in an 80-million-gallon water deficiency for the 250 arable acres on the reservation.

### Older Trees Vulnerable

The trees most affected by the drought, he said, are the older and larger trees which have not yet recovered from the drought of several summers ago. In a drought-weakened condition these trees are more susceptible to disease and insects and have required considerable attention to keep them alive.

Curiously enough, young trees are less affected by drought than older ones. "They are like kids," Mr. Myers said. "They don't take as long to recover from an illness as 'we old people' do."

So despite the many hours of overtime Mr. Myers and his staff put in with each snowstorm, he considers snow a necessity now. "Even the subsoil is dry this year," he said.

# Dr. Endicott, NCI, Is Reelected To ACS Directors Board

Dr. Kenneth M. Endicott, Director of the National Cancer Institute, has been reelected to the Board of Directors of the American Cancer Society. The election took place October 24 at the National Society's annual meeting in New York City.

in 1938, and his M.D. degree from Johns Hopkins University Medical School in 1942.

Before coming to the Heart Institute, he was Associate Professor of Physiology at the Harvard School of Public Health. He has held his present position since 1954.

# MARU Study Implicates Wild Lizard as Host For Encephalitis Virus

Scientists of the National Institute of Allergy and Infectious Diseases' Middle America Research Unit in the Panama Canal Zone have discovered the presence of eastern equine encephalitis H<sub>1</sub> antibody in wild lizards, thus implicating this animal as a reservoir for the disease.

Between October 1958 and April 1960, the MARU scientists collected wild lizards from several Panamanian ranches where an EEE outbreak had occurred among horses in July 1958.

When sera of 246 lizards were tested, substances inhibiting hemagglutination by EEE virus antigen were found in about 14 percent, suggesting previous EEE infection.

Results of the investigation are reported in the American Journal of Hygiene by Dr. Alexis Shelokov, Chief of NIAID's Laboratory of Tropical Virology; and Drs. John E. Craighead and Pauline H. Peralta.

Studies on EEE virus have failed to explain how it is maintained and disseminated in nature. It now appears likely that small vertebrate animals serve as reservoirs since there is little evidence to suggest that the virus survives for indefinite periods in the arthropod vector.

Although birds and rodents may play a role in the natural history of the virus, only the lizard has provided laboratory evidence for a significant role to date. The authors caution that conclusive proof of the lizard's role must await the recovery of the virus from naturally infected animals.

### Dr. Cameron Named as Head of St. Elizabeths

DHEW Secretary Anthony J. Celebrezze recently announced the appointment of Dr. Dale C. Cameron, Assistant Superintendent of St. Elizabeths Hospital, as Superintendent of the Hospital.

Dr. Cameron succeeds Dr. Winfred Overholser who retired October 4 after holding the post for 25 years

A member of the PHS Commissioned Corps, Dr. Cameron was appointed Assistant Chief of the Mental Hygiene Division, forerunner of the National Institute of Mental Health, in 1945.

He resigned his commission in 1954 to become Medical Director of the Minnesota Department of Public Welfare. He was recommissioned in the PHS in 1960 and assigned to work with Dr. Overholser at St. Elizabeths. In his new position he holds the rank of Assistant Surgeon General.

# Tranquilizers Converted Into Antidepressants By Demethylation

Scientists from the National Heart Institute report that removal of a single methyl (-CH3) group from trifluopromazine and certain other chlorpromazine-like compounds converts these tranquilizing agents into powerful antidepressants.

Drs. Marcel H. Bickel, Fridolin Sulser, and Bernard B. Brodie, of the NHI Laboratory of Chemical Pharmacology, presented their findings at the Fall Pharmacology Meeting held in Nashville.

The idea for the chemical modification of trifluopromazine and its near relatives arose from earlier studies on the antidepressant drug Imipramine (Tofranil, Geigy).

### Metabolite Is Stimulant

The studies had shown that desmethylimipramine, the metabolite resulting from the demethylation of Imipramine, was responsible for the antidepressant effects attributed to Imipramine. The parent drug proved to be a sedative that actually interfered with the action of its metabolite.

Noting the structural similarities between Imipramine and certain chlorpromazine-like tranquilizers, the scientists reasoned that the demethylation of these compounds might bring about a similar Jekyll-and-Hyde transformation in their actions. This proved to be the case.

Several of these modified compounds were able to block the syndrome of central nervous system depression induced in animals by sedative doses of reserpine. In the past, the effectiveness of antidepressants against this syndrome in animals has proved to be a reliable index of their effectiveness against "naturally occurring" endogenous depression in man.

Since desmethylimipramine has already proved its worth in clinical trials, it appears likely that these new compounds may also find clinical application against certain mental disorders.

### Heavy Workload Divides Fellowship Review Panel

The Anatomy and Physiology Fellowship Review Panel of the Division of Research Grants has been divided into two panels—the Anatomy and Pathology Panel, and the Physiology Panel. The division was made necessary by an increasing workload.

Dr. Harry J. Clausen, Executive Secretary of the former Anatomy and Physiology Fellowship Review Panel, will serve in that capacity for both panels until an executive

### MRS. TERRY HOSTESS ON TOUR OF NIH



Mrs. Anthony J. Celebrezze, wife of the Secretary of DHEW (right), visits NIH for the first time, October 24, as the guest of Mrs. Luther L. Terry, wife of the PHS Surgeon General (left), with Mrs. Stephen M. Young, wife of the Senator from Ohio and a former NIH staff member. Others in the visiting group, not shown, were Mrs. Walter W. Heller, whose husband is Chairman of the President's Council of Economic Advisors; Mrs. David E. Price, wife of the Deputy Surgeon General of PHS; Mrs. Eugene J. McCarthy, wife of the Senator from Minnesota; and Mrs. Edmund S. Muskie, wife of the Senator from Maine. The visitors witnessed a screening of the NIH film and were escorted by Mrs. Terry on a tour of the Clinical Center and a visit to Building 8 to learn about NIAID's Laboratory of Germfree Animal Research. They were briefed on current clinical studies, inspected some of the CC's facilities for children patients, and visited a metabolic kitchen during luncheon preparations. Mrs. Terry and her guests also toured the National Library of Medicine.—Photo by Sam Silverman.

# Fully Automatic Tube System Installed In Building 31; All Stations Reidentified

On Monday of last week a fully automatic pneumatic tube system was placed in operation in Building 31. The announcement came from Donald R. Cushing, Chief of the Office Services Branch, OAM.

This system, Mr. Cushing said, is of the 3-ring dial carrier type designed to send messages to selected stations automatically. Unlike the system in other buildings, there is no central clearing room required in Building 31 to dispatch the carriers to their destinations.

To make the Building 31 system compatible with existing stations in Buildings 1, 10, 13, 29, and 30, it was necessary to change all station identifications.

A directory of individual stations, both old and new, and instructions in the method of operation have been posted at each station. These instructions, he said,

secretary is appointed for the new Physiology Panel.

The two new groups will each handle about half of the nearly 500 applications formerly reviewed each year by the single panel.

The action brings to 11 the number of fellowship review panels comprising DRG's Central Qualifications Board. The panels average five to seven members, and resemble study sections in make-up.

should be read carefully before attempting to dispatch the carriers.

To assist employees in operation of the pneumatic tube system, Mr. Cushing offered these suggestions:

1. Include the addressee's name, building, room, and tube station number on material dispatched.

2. Insert material in carrier and fasten carrier securely. Then dial the carrier rings for receiving station. (Stations are identified on the carriers by dialing two alphabetical rings and one numerical ring.)

3. Insert carrier in station, feltend first. Send additional carriers at intervals of not less than 30 seconds.

4. Do not remove material by striking or pounding carriers.

5. Return excess carriers either to the Mail Room, Bldg. 31 (AS-0), or the Mail Room, Bldg. 10 (HU-0)

Employees who have difficulty in using this system or require additional carriers, may call Ext. 5651, Bldg. 31, or Ext. 2050, Bldg. 10.

# Brown Univ. Biology Lab Named for NIH Advisor; Dr. MacCardle Honored

A new two-million-dollar biology laboratory, named in honor of Prof. J. Walter Wilson, a member of the Brown University faculty for more than 40 years and an advisor at various times to several National Institutes of Health programs, was dedicated recently on the University's campus in Providence, R. I. Dr. Wilson is currently a member of the National Advisory Cancer Council.

Three of Dr. Wilson's former students, including Dr. Ross C. MacCardle of the National Cancer Institute's Laboratory of Pathology, received honorary Doctor of Science degrees at a convocation held the day the new building was dedicated. Dr. MacCardle has been a member of the NCI staff since 1946 and was Scientific Editor of the Journal of the National Cancer Institute from 1947 to 1953.

### **Develops NIH Activities**

In addition to serving on the Cancer Council, Dr. Wilson has helped develop other NIH activities as one of the original members of the National Advisory Council on Health Research Facilities, as a member and first Chairman of the Morphology and Genetics Study Section in the Division of Research Grants, and as a member of advisory panels of the Cancer Chemotherapy National Service Center.

Surgeon General Luther L. Terry headed a delegation of Public Health Service officials attending the dedication ceremonies. Accompanying him were Dr. Ralph G. Meader, NCI Associate Director for Grants and Training, and Dr. Francis L. Schmehl, Chief of the Health Research Facilities Branch of the Division of Research Facilities and Resources, which provided some of the funds for construction of the Wilson Laboratory.

Dr. Terry and Representative John E. Fogarty of Rhode Island, Chairman of the House of Representatives subcommittee on appropriations for the Department of Labor and the Department of Health, Education, and Welfare, spoke at the dedication.

### List of Latest Arrivals Of Visiting Scientists

10/12—Dr. Eigo Takabatake, Japan, Drug Metabolism. Sponsor, Dr. Brodie, NHI, Bldg. 10, Rm. 7N117.

10/22—Dr. Fumio Sakiyama, Japan, Peptide and Protein Chemistry. Sponsor, Dr. Witkop, NIAMD, Bldg. 4, Rm. 228.

10/25—Dr. Jakob Schreiber, Switzerland, Modification of Proteins and Enzyme Studies. Sponsor, Dr. Witkop, NIAMD, Bldg. 4, Rm. 228.

# MentalRetardation Report Submitted To White House

A comprehensive, long-range national program to combat mental retardation was recommended to President Kennedy in a report submitted October 16 by the Panel on Mental Retardation, appointed by him a year ago.

The report, stressing the need to "think and plan boldly," included more than 100 recommendations for a "broad spectrum" attack to prevent, treat, and alleviate mental retardation.

The Panel said an estimated 5.4 million American children and adults—about 3 percent of the total population—are classified as mentally retarded. About 400,000 of these are so retarded they require constant care or supervision, and more than half of that number receive care in residential facilities, the report stated.

The remaining 5 million are mildly retarded and include the subnormal individuals who often become school dropouts and unemployed. An estimated 126,000 children born each year will be mentally retarded at some time in their lives, according to the report.

### **Activities Cited**

The 27 members of the Panel were appointed by the President in October of last year. Activities included task force research into segments of the overall problem of retardation, travel for study in this country and abroad, and a series of seven regional meetings, in the East, South, and West, to hear reports on problems, accomplishments, and suggested recommendations.

The report's recommendations focused upon three primary areas: research, preventive services, and planned development of strengthened community-centered service providing a continuum of care.

Among the recommendations were:

- 1. Increased basic and applied research, including eventual establishment of 10 research centers and a National Research Institute of Learning.
- 2. Measures to increase the supply of medical and other specialists through college scholarships, aid for medical schools and students, post-doctoral fellowships, teacher-investigatorships, and aid for research specialist training.
- 3. Measures to create a new pattern in the institutional care of the retarded, utilizing small, accessible residential treatment centers in communities.
- 4. Preventive health measures.
- 5. Increased financial assistance for training teachers of special

### Int'l Mycology Society Honors Dr. Emmons

Dr. Chester W. Emmons, Chief of the Medical Mycology Section of the Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, has been elected the first, and at present, the only Honorary Member of the International Society for Human and Animal Mycology.

The constitution of the Society specifies that "a member who has made extraordinary scientific contributions to medical and veterinary mycology is eligible for election as an honorary member. The number of honorary members shall not exceed three at any one time."

### Helen B. Smith Retires; Served Gov't 27 Years

Helen B. Smith, a clerk-typist in the Career Development Review Branch, Division of Research Grants, retired October 26 after 27 years of Government service.

Mrs. Smith began her Federal service career with the War Department (now the Department of Defense) in 1918. She served in a civilian status with the Community Motion Picture Bureau of the Army of Occupation in Paris, France, from August 1919 until January 1920 when she returned to the United States to accept an appointment with the Treasury Department.

In 1925 Mrs. Smith left Government service for 15 years. She returned to Federal work in 1942 as a junior clerk with the Public Health Service in Washington. In 1943 she transferred to DRG where she spent the remainder of her career.

A native of Granada, Miss., Mrs. Smith has lived in Chevy Chase, Md., for the past 36 years.

education, and college instructors for such teachers.

- 6. Federal project grants to expand, enrich, and improve quality of special education for the retarded.
- 7. Special expansion grants to increase vocational rehabilitation services for the retarded, along with grants for construction of workshops.
- 8. A new legal concept of the retarded to protect individuals' civil rights and to give guidance in policy and court actions.
- 9. Creation of a Domestic Peace Corps nationally to help stimulate voluntary organizations to greater efforts and to encourage volunteers to help man community services.

The report also pointed out that state, local, and private agencies must continue to carry the principal responsibility and must also increase their efforts to combat mental retardation.

Dr. Leonard Mayo, on leave as

# NIAID Tests Show Volunteers Free of Malaria One Year After Single Injection of New Drug

A new antimalarial drug, CI501, given to prisoner volunteers in a single injection nearly one year ago, is continuing to protect them from malaria despite the fact that they have since been bitten by heavily infected mosquitoes at monthly intervals.

Controls who did not receive the drug invariably contracted malaria when bitten by the same mosqui-

toes.

Results of clinical trials of the long-lasting antimalarial drug which thus far has been protective nearly 10 times longer than conventional suppressives, were reported last Thursday to members of the American Society of Tropical Medicine and Hygiene, meeting in Atlanta, Ga., by Dr. G. Robert Coatney, Chief of the Laboratory of Parasite Chemotherapy, National Institute of Allergy and Infectious Diseases.

### Global Use Foreseen

Developed by scientists at Parke, Davis & Company, Ann Arbor, Mich., CI501 is an experimental drug, not yet available for general use. If the promise of its initial trials in volunteers is borne out under actual field conditions, the compound should greatly increase the chances of success in worldwide malaria eradication efforts. The United States plays a major role in the program to eliminate this disease, which afflicts 200 million people and kills two million each year.

Dr. Coatney and his associates, Dr. Peter G. Contacos, Dr. Harvey A. Elder, and John W. Kilpatrick, conducted the trials at the U.S. Penitentiary in Atlanta. Some 50 inmate volunteers participated in the study.

### Injected Intramuscularly

The first injections of the new drug were given November 24, 1961, to five volunteers. The drug was injected intramuscularly at a dosage of five milligrams per kilogram of body weight. Within two months, 25 additional volunteers received the drug.

Most were bitten by heavily infected Anopheles quadrimaculatus mosquitoes approximately one week after the suppressive injections, but a few were not challenged until as late as  $5\frac{1}{2}$  months after receiving the protective drug.

Of 10 volunteers in the first two groups, two were bitten once, eight, twice; six, three times; four, four times; and two, eight times, at approximately monthly intervals. To date, none of these people

Executive Director of the Association for the Aid of Crippled Children, New York City, served as chairman of the Panel. Dr. Seymour S. Kety of the NIMH was a Panel member, and Dr. Bertram S. Brown of the NIMH was a member of the Panel staff. Several other NIMH staff members served as technical consultants to the Panel.

have developed any evidence, clinical or parasitological, of malaria.

Meanwhile, volunteer controls who did not receive the drug invariably came down with malaria when bitten by the same mosquitoes. They were treated with conventional antimalarial drugs, such as amodiaquine.

When the new drug was tested experimentally for curative powers in patients with malaria, symptoms disappeared and an apparent cure was effected. However, the investigators believe it is too soon to say that the drug will be therapeutically effective as well as protective.

### Procedure Conjectured

It is entirely possible, the NIAID scientists feel, that this new antimalarial drug eliminates the parasites before infection can take root but studies of this point are not yet complete. The scientists believe that the injected chemical is held in the intramuscular tissues, where it releases its effective materials into the circulating blood to be carried to every part of the body. Whether the parasites which typically form a reservoir in liver cells are actually killed remains to be determined.

In a separate investigation, a slightly different form of the drug has been tested on nine volunteers. However, one of them contracted malaria 169 days after the original challenge by the infected mosquitoes, although he had been previously challenged on the sixth day and again on the 79th day after receiving the drug without contracting the disease.

None of the volunteers injected with the original formulation has shown any evidence of malaria infection. As of October 24, 1962, volunteers in the first group had been free of any evidence of malaria for 333 days.

### No Toxicity Noted

No toxic effects have been observed during these studies.

The new drug is a pamoic acid salt of the base 4, 6-Diamino-1-(p-Chlorophenyl)-1, 2-Dihydro-2, 2-Dimethyl-s-Triazine. This base was reported 11 years ago to be formed in the body from the antimalarial drug Chlorguanide.

The preliminary results are termed "spectacular" by some of the investigators, but they caution that it remains to be determined whether these results will be borne out under actual field conditions in malarious areas of the world.

# Two NIMH Publications Review Program Growth

The National Institute of Mental Health has issued two new publications containing descriptive statistical data on its research grant program.

The companion volumes—A Summary of the Research Grant Program, 1948-1961, and A Source Book of Descriptive Data, Fiscal Year 1961—reflect the growth and diversity of the NIMH program from its establishment until the end of FY 1961.

During that time NIMH supported 2,597 research projects ranging in duration from one to 13 years, representing 5,330 annual grants and a total of \$106,717,850 in awards.

### Increases Greatly

At the start of the program in 1948, the largest NIMH award was in the amount of \$26,500 while in 1961 it was \$345,000. The total number of grants awarded in FY 1961 showed an increase of over 30 times the number awarded in FY 1948 with a dollar value increase of over 80 times. The mean annual award increased from \$9,822 in 1948 to \$23,711 in 1961.

Scientists participating in the NIMH research program in the 13 years covered by the reports, represented over 30 professional disciplines in more than 35 fields.

In addition to studies in the medical, biological, psychological, and social sciences, a large segment of the program was devoted to basic research in the behaviorial sciences—including a variety of studies of biological, psychological, social and cultural correlates of behavior.

Copies of the publications, prepared by the Program Analysis Section of the Research Grants and Fellowship Branch, may be obtained without charge from the NIMH Publications and Reports Section, Bldg. 31, Rm. 2A50, Ext. 4795.

### RADIATION

(Continued from Page 1)

duce the background radiation to a minimum, Dr. Andrews said, since modern steel may contain some radioactivity.

The rooms are equipped with their own specially filtered air-conditioning system. An intercom system permits conversation with the operator outside and can be used to pipe recorded music or radio programs into the rooms.

Two special gamma ray spectrometers, which record data from each of the whole-body counters, are located outside the armor-plate rooms. The data is printed on paper tape for future analysis.

The machine connected to the isotope-identifying counter is also capable of projecting a curve that shows what isotopes are present



The members of the Tissue Preparation Laboratory, a part of NIAMD's Laboratory of Experimental Pathology, receive cash awards for "superb and long-standing performance" at an informal group award ceremony September 28. The awards were presented by Dr. G. Donald Whedon, Acting Director of NIAMD (left). Shaking hands are Dr. DeWitt Stetten, NIAMD Associate Director in Charge of Research (right), and Roy Reed, Laboratory Supervisor. Other members of the lab staff (I. to r.): Morris Haugh, Louise Holthaus, Madora Swink, Virginia Reveal, and Walter Rawlings. The seventh member of the staff, Roland Harding, was not present.—Photo by Bob Pumphrey.

# NIAID Exhibit Honoring PHS Displayed at APHA Meeting

An anniversary exhibit, marking the 75th year of research in the Public Health Service, was displayed for the first time outside NIH at the recent meeting of the American Public Health Association in Miami Beach.

Prepared by the National Institute of Allergy and Infectious Diseases as a tribute to PHS research, the exhibit's four panels picture research highlights during the years since 1887 when PHS began its research activities in a one-room laboratory on Staten Island

and their relative amounts.

A third data-recording instrument, called a "spectrum stripper" —which records the radiation curve for any particular individual, and then automatically subtracts this from any subsequent readings on that individual—is expected to arrive at NIH sometime soon, Dr. Andrews said. This instrument should make analysis of the readings easier and more accurate.

To check the gamma ray counters for accuracy, Dr. Andrews and his coworkers, Dorothy Peterson and Ray Murphy, use "Christine," a transparent manikin with all kinds of internal compartments.

By putting a known quantity of isotope in one of these compartments and comparing this with the reading on the whole-body counter, any error can be detected.

The two body counters, the datarecording machines, and the armor plate rooms were constructed for NIH by the Dixie Manufacturing Co., Inc., of Baltimore, Md., at a total cost of \$240,000.

## NIMH Scientists Attend Mental Health Congress

Dr. Robert H. Felix, Director of the National Institute of Mental Health, and NIMH staff members participated in the American Medical Association's National Congress on Mental Illness and Health in Chicago last month.

The 3-day congress, called by the AMA to launch a new and comprehensive mental health program developed by its Council on Mental Health, was held in cooperation with the American Psychiatric Association and with the support of the National Association for Mental Health.

### Dr. Felix Presides

Dr. Felix presided over a session on "Integrated Community Services for the Mentally Ill." NIMH also was represented by Dr. Joseph M. Bobbitt, Associate Director for Program Development, and other staff.

The new AMA program draws heavily on Action for Mental Health, the Report of the Joint Commission on Mental Illness and Health. The program was developed in cooperation with mental health committees of State Medical Societies.

Attended by 2,000 physicians from state and local medical societies and other mental health workers, the meeting was devoted to planning specific activities to carry out the AMA program.

Recommendations were formulated calling for increased action in areas of mental health services, manpower, research, communications, and physician education at national, state, and local levels.

AMA President, Dr. George Fister, pledged the full support and resources of the AMA in the campaign against mental illness.

# Marked Increase Noted In Taste Sensitivity Of Addisonian Patients

When compared with normal subjects, patients with adrenal cortical insufficiency exhibit a 40-to 100-fold increase in taste sensitivity to substances that are salty, sour, bitter, or sweet.

This was reported by Dr. Irwin R. Henkin, of the Laboratory of Clinical Science, National Institute of Mental Health, and Drs. John R. Gill and Frederic C. Bartter, of the Clinical Endocrinology Branch, National Heart Institute, at the recent Endocrine Society Meeting.

The taste detection thresholds of normal subjects and of patients with Addison's disease were measured. Each was asked to choose a test solution from among three fluid samples, two of which were distilled water.

### Presented at Random

The test solutions contained urea (bitter), hydrochloric acid (sour), sucrose (sweet), or various sodium or potassium salts. Eleven different concentrations of each test solution were used. They were presented to the subjects in a random order.

The Addisonian patients could consistently detect the test solutions in concentrations ranging from 40 to 100 times lower than those that could be consistently detected by the normal subjects.

Oddly enough, the taste sensitivity of the patients could be returned to the normal range by administering steroids that affect carbohydrate metabolism. Sodium retaining steroids had no effect. How variations in carbohydrate-active steroids might mediate these striking variations in taste sensitivity is still a mystery.

### Russian Paper on Aging Available from CAR

A Russian paper on aging at the molecular level, translated by the Translating Section of the Library Branch, DRS, has been issued in pamphlet form by the DGMS Center for Aging Research.

The paper, originally published in the Russian Review of Biology, was presented at the Fifth International Congress on Gerontology in San Francisco by Zh. A. Medvedev, Department of Agrochemistry and Biochemistry, Primiriasev Agricultural Academy, Moscow.

Single copies of the pamphlet, Aging Organism at the Molecular Level, may be obtained without charge from the Center for Aging Research, Trunnell Building, Bethesda 14, Md. The telephone extension is 4121.

### DR. SMADEL

(Continued from Page 1)

The second Lasker award, the Basic Medical Research Award, was won by Dr. C. H. Li, Professor of Biochemistry and Experimental Endocrinology, and Director of the Hormone Research Laboratory at the University of California in Berkeley, for his isolation and identification of six of the hormones of the anterior pituitary gland.

Announcement of the Lasker Awards, each carrying an honorarium of \$10,000, was made in New York City by Mrs. Albert D. Lasker, President of the Albert and Mary Lasker Foundation.

The Lasker Clinical Research Award honors "significant contributions to clinical investigation, and the application of basic research findings to eliminate the major medical causes of death and disability . . . which result in the prolongation of the prime of life."

Working with British investigators in Malaya, Dr. Smadel's research, during the period from 1948 to 1952, showed that certain infectious diseases could be treated successfully with the antibiotic chloramphenicol.

### Demonstrates Use

He was the first to demonstrate its use for treating typhoid fever and as a cure for the rickettsial diseases, including scrub typhus, epidemic typhus fever, and Rocky Mountain spotted fever.

Prior to Dr. Smadel's discovery in 1948 of the use of chloramphenicol for treating typhoid fever, about 12 percent of all those contracting the disease died of it. Today, through the use of chloramphenicol, such fatalities have been reduced to about 2 or 3 percent.

Dr. Smadel's work has greatly contributed to the control of cholera and plague. Currently, he is contributing to research on cholera through his activities as Chairman of the NIH Cholera Advisory Committee and of the Technical Committee of the Cholera Research Laboratory in Dacca, East Pakistan

In citing Dr. Smadel, the Lasker Award jury, composed of 16 eminent American scientists, emphasized his dedication, without thought of personal hazard, and his inspiring leadership in stimulating others to scientific achievement.

His contributions to solution of the problems of scrub typhus, epidemic typhus fever, cholera, and typhoid were voted by the jury as especially timely and important to the health of the Southeast Asia area, particularly in view of the many American military and civilian personnel now serving in the Far East.



Ranger Hal of the WTOP-TV show for children (right), introduces a young friend, Warren T. (Teddy) Greenleaf, IV, age 2, of Richmond, Va., to Mike the Clown and Oswald the Rabbit during visit to the Clinical Center October 20, to entertain CC children patients. The Ranger Hal cartoon show, sponsored by the Department of Agriculture's Forest Service, appears weekday mornings on television. On Saturdays, the program is devoted to "The Birthday Party," with participation of Washington area children who have birthdays during the month.—Photo by Sam Silverman.

Both Dr. Smadel and Dr. Li will receive their honoraria, citations and gold statuettes of the Winged Victory of Samothrace, representing victory over death and disease, at a luncheon on November 14 at the Sheraton-East Hotel in New York City, before an invited audience of about 250 officials, scientists, press, and representatives of social, medical and welfare agencies.

That evening the Lasker Foundation will further honor Dr. Smadel and Dr. Li at a dinner, to be held at the New York Academy of Medicine, at which more than 100 medical leaders will be present.

### Will Present Papers

At 8:30 the same evening, Drs. Smadel and Li will present scientific papers on the major and important aspects of their work, marking the first time that Albert Lasker Award winners have presented such papers at the Academy of Medicine. Dr. Smadel will discuss "Intracellular Infections." Dr. Li will speak on "Perspectives in the Endocrinology of the Anterior Pituitary Hormone." The medical profession and public are invited to attend.

Dr. Smadel, who became Chief of the Laboratory of Virology and Rickettsiology on July 1, 1960, has had a long career in research in infectious diseases and their control. His work has covered virtually the entire field of bacteriology and immunology with special emphasis on rickettsial diseases, viral diseases, including psittacosis, vaccinia, lymphocytic choriomeningitis, smallpox, influenza, encepha-

litis, poliomyelitis, and epidemic hemorrhagic fever. He has also made important contributions to such diseases as plague and leptospirosis.

He received his B. A. degree from the University of Pennsylvania in 1928, and his M. D. degree in 1931 from Washington University, St. Louis, Before coming to NIH in 1956 as Associate Director for Intramural Research, Dr. Smadel was Director of the Division of Communicable Diseases at the Walter Reed Army Institute of Research. Prior to that Dr. Smadel did research work for four years in the Army during World War II, and for eight years at the Rockefeller Institute for Medical Research.

Dr. Li has been engaged since the late 1930s in an extensive program of biological and chemical investigation of the hormones of the anterior and intermediate lobes of the pituitary gland. His isolation and identification of six hormones of the anterior pituitary gland, including MSH of the intermediate lobe, is considered a major contribution to the understanding of the endocrine functions.

The other five hormones isolated and identified by Dr. Li are growth hormone, ACTH, and three gonadotropins (FSH, ICSH, and Prolactin).

In the past year, Dr. Li also has succeeded in synthesizing a 19-unit polypeptide possessing both adrenocorticotropic and melanotropic activities in high potency, as well as lipolytic and erythropoietic functions comparable to those of naturally occurring ACTH.

## Rocky Mt. Study Shows Rabid Bats Constitute Serious Health Threat

A seven-year study of bat rabies in Montana has resulted in the delineation of a potential public health problem of major significance. The problem has two aspects: the actual and potential spread of rabies from bats to man; and the transmission of the virus to wild animals and livestock.

Six human cases of rabies in the United States have been attributed directly to bats, and the increase of rabid bats constitutes a very real danger. Transmission to other animals, an equally dangerous potential source of human infection, has not yet been demonstrated in Montana but may possibly be the source of sporadic rabies in dogs, cats, foxes, skunks and raccoons in Florida.

### Collect Many Species

Since the isolation of rabies virus from a bat in western Montana in 1954, Dr. J. Frederick Bell, G. John Moore, George H. Raymond, and C. E. Tibbs of NIAID's Rocky Mountain Laboratory collected several thousand bats representing almost all species known to occur in Montana and examined them for rabies virus. Their report appears in the American Journal of Public Health.

The scientists demonstrated the rabies virus by the oral swab method in 21 bats of 8 species. This indicates a very high incidence of rabies probably exists in the bat population. Six of the infected bats were tested for ability to transmit virus by bite and five did so on one or more occasions. Many of the bats showed outward evidence of infection such as confusion, incoordination or aggressiveness.

### Celebrezze Names Levy To Information Post

Anthony J. Celebrezze, Secretary of the Department of Health, Education, and Welfare, has announced the appointment of Harold R. Levy as Assistant to the Secretary for Public Affairs.

Mr. Levy, 42, succeeds Bess Furman Armstrong who has accepted a special assignment from the Public Health Service.

Prior to his appointment Mr. Levy had been Chief of the Washington Bureau of Newsday, a Long Island, N. Y., daily newspaper, for the past seven years. He joined the Newsday staff in 1953. Previously he was Sunday Editor of the Winston-Salem (N. C.) Journal and Sentinel

Mr. Levy's wife is the former Bonnie Angelo, a Newsday correspondent and past president of the Women's National Press Club.